IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF WYOMING

SINCLAIR WYOMING REFINING COMPANY,
a Wyoming corporation,

Plaintiff,

vs. Case No. 12-CV-196-J

PRO-INSPECT INC, a Texas corporation dba
Moody International Asset Integrity Services Inc,

Defendants.

OPINION AND ORDER STATING FINDINGS OF FACT AND CONCLUSIONS OF LAW

This matter is before the Court following a nine-day bench trial. At trial, the plaintiff Sinclair Wyoming Refining Company ("Sinclair") was represented by Patrick R. Day, Buck S. Beltzer, and Geraldine A. Brimmer. The defendant Pro-Inspect, Inc. (d/b/a Moody International Asset Integrity Services, Inc., a Texas Corporation) ("Pro-Inspect" hereafter for purposes of this order) was represented by Paul J. Hickey, O'Kelley H. Pearson, John J. Kenney, and Jules R. Cattie, III.

Having carefully considered the testimony and evidence presented and the arguments of counsel, the Court makes the following findings of fact and conclusions of law.[1]

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[1] Having reviewed the parties' proposed findings of fact and conclusions of law, as well as (continued...)

Introduction and Brief Summary of Contentions

Sinclair owns and operates a refinery located at Sinclair, Wyoming, processing crude oil, including sour crude from Canada. Sinclair is a Wyoming corporation, with its principal place of business in Utah. Pro-Inspect is engaged by refiners to perform inspection services at their facilities. Pro-Inspect is a Texas corporation and its principal place of business is in Texas. Sinclair has asserted two claims against Pro-Inspect, breach of contract and negligence. Sinclair's complaint was filed August 30, 2012, seeking to recover approximately $7.5 million in property damages and $50 million in other "business interruption" losses it claims are attributable to the fire that occurred on September 1, 2011, when a pipe containing high temperature slop oil ruptured. Pro-Inspect has denied all claims and disputes that Sinclair is entitled to recover damages in any amount. This Court has diversity jurisdiction pursuant to 28 U.S.C. § 1332. Venue is proper in this district pursuant to 28 U.S.C. § 1390.

Broadly, Sinclair contends that Pro-Inspect's inspector, Josh Kiss, was required by the parties' contract, and by the American Petroleum Institute (API) Codes governing piping inspections by API 570 certified inspectors, to review all the data gathered by technicians Malave and Hulsey and carefully consider potential risks to the piping circuit. Sinclair contends it hired Pro-Inspect specifically to provide a knowledgeable API 570 certified inspector to conduct inspections at the

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[1](...continued)
all the testimony and evidence presented at the trial, the Court finds that further argument would not be helpful to the Court. The Court will decide the matter based upon all matters of record, including evidence and testimony from the trial, and the parties' written submissions. Both parties submitted extensive proposed Findings of Fact and Conclusions which clearly set forth their respective assessments of the trial and the decision they believe to be appropriate.

refinery. Sinclair contends the API Code obligates inspectors to, among other things: (1) review all ultrasound data; (2) consider prior inspection histories; (3) confirm that piping systems are properly classified for risk; (4) evaluate the need for, and determine the proper number of corrosion monitoring locations (CMLs); (5) ensure that CML locations are placed on a circuit and that thickness data at those locations are collected; (6) consider the data collected for the risk of failure; (7) calculate the remaining life of the piping in the circuit; and (8) immediately report thin pipe to the refinery owner for further evaluation and action. Sinclair contends these obligations are all components of a standard industry inspection and are spelled out in API 570, the applicable piping inspection code. Sinclair contends that Pro-Inspect's inspector, Josh Kiss, failed to do every one of these tasks, causing a significant stretch of paper-thin pipe to be missed, proximately causing the explosion and fire and resultant damages. The section of pipe involved in the fire has been lost or destroyed by Sinclair and as a consequence could not be inspected or tested by Pro-Inspect.

Pro-Inspect denies Sinclair's allegations and denies any liability for the September 1, 2011 fire. It asserts that its employees, Josh Kiss and Michael Fitzpatrick, were directed by Sinclair to perform two assignments: one, to organize certain refinery piping systems into manageable circuits in order to facilitate the inspection process (i.e., to systemize and circuitize); and, two, to conduct an external visual inspection to look for external damage to the piping structure, which was wrapped in thick, non-transparent insulation. The only work that Pro-Inspect did on the circuit which is the subject of this lawsuit, 02-04-02, was external visual inspection of the piping by Kiss. Neither Kiss nor Fitzpatrick, nor any other person at Pro-Inspect, was asked or directed by Sinclair to make ultrasonic thickness ("UT") readings to measure internal corrosion of the pipes. Sinclair had hired

a different contractor, TechCorr, to perform that service through its employees, Juan Malave and Russell Hulsey.

Pro-Inspect maintains that its inspectors performed all of the tasks that Sinclair directed them to perform, and that they did so, with no complaints or other instructions from the Sinclair personnel overseeing their work. Pro-Inspect asserts that it fulfilled its contractual obligations to Sinclair and cannot be held responsible for the fire. Furthermore, Pro-Inspect urges that any acts and omissions Sinclair complains of were the acts of Sinclair or TechCorr, the employer of Malave and Hulsey, and not Pro-Inspect. Pro-Inspect asserts that the proximate cause of the fire and resulting damages was Sinclair's poor management of its own refinery and not a result of anything Pro-Inspect did or failed to do.

Standard for Non-Jury Trial

Fed. R. Civ. P. 52(a) provides that in all actions tried upon the facts without a jury or with an advisory jury, the court shall find the facts specially and state its conclusions of law separately.

Thus, the role of this Court in this action tried upon the facts without a jury is to find the facts specially and to state separately its conclusions of law thereon. *OCI Wyoming, L.P. v. Pacificorp*, 479 F.3d 1199, 1203 (10th Cir. 2007)(citing Fed. R. Civ. P. 52(a)). The Court's findings of fact "should be sufficient to indicate the factual basis for the court's general conclusion as to ultimate facts[,] . . . should indicate the legal standards against which the evidence was measured[,] . . . [and] should be broad enough to cover all material issues." *Id.* (citations omitted). The Court is not required to undertake this task in excruciating detail. *Id.* at 1204. "The judge need only make brief,

definite, pertinent findings and conclusions upon the contested matters; there is no necessity for overelaboration of detail or particularization of facts." *Id.* (citations omitted).

Findings of Fact

On September 1, 2011, there was a fire at the Sinclair Wyoming Refining Company, which occurred after a pipe ruptured in the refinery's 585 Vacuum Unit at Circuit 02-04-02. Fortunately, no one was injured in the fire. Sinclair's claimed damages include property and business interruption economic damages. Sinclair alleges that the fire and claimed resultant damages were caused by Pro-Inspect's breach of contract and negligence in the inspection of that same circuit in January of 2011, nearly nine months before the fire. Pro-Inspect denies these claims and asserts that the fire was the result of Sinclair's own failures and states that it fulfilled all contractual obligations owed to Sinclair and was not negligent in the performance of its duties.

There are two main crude processing units in Sinclair's refinery: the 582 unit processes sweet crude and the 581/583 unit processes primarily sour crude. Raymond Hansen, who was the operations manager at the facility in 2011, testified about production at the Sinclair refinery. He explained there are a number of intermediate units which process oil from the crude units into marketable products, such as LPG, gasoline, jet fuel, diesel, sulfur, and other products for consumers. There are two components of the 581/583 unit including the 581 atmospheric distillation tower in which sour crude is heated and distilled into different fractions; reduced crude which is not distilled by the 581 unit is piped into the 583 unit, which separates reduced crude further in the 583 vacuum tower.

A 2008 revamp of the refinery was intended, at least in part, to allow the processing of less expensive crudes. The 2008 revamp project involved a considerable investment by Sinclair, approximately $90 million. It included extensive pipe and heater replacements to allow production of the less costly Canadian crude oils. The pipe that ruptured September 1, 2011 in the 02-04-02 circuit and which is at issue here had not been replaced during the 2008 revamp, although some modifications had been made to the line during the revamp. The particular pipe that had been left in place during the 2008 revamp had been in service for 30 years at the time of the September 1, 2011 rupture.

In 2010, less costly but more corrosive Canadian Cold Lake crudes were introduced into the refinery. Canadian Cold Lake and Western Canadian Select crudes were run in the refinery in 2010 and in 2011. Beginning in October 2010, Sinclair's refinery processed up to 40% Canadian Cold Lake Crude. Jt. Ex. 31, Ex. Z11. Crude oil coming into the refinery may be received from various sources, called a "basket of crude," which might include Canadian, North Dakota or Wyoming crude oils. Tr. Vol. I, Hansen, 94. Hansen testified "[w]hat we try to do is run really as smooth as we can because of the complexity of the refinery. There's a push and pull between all these different units and our incoming inventories, our outgoing inventories, and so we try to run a crude that's really a consistent sulfur on the sour unit, a consistent sulfur on the sweet unit, and that it's a consistent density. We refer to that as API gravity." *Id.* Hansen described equipment, noting that there are massive amounts of piping surrounding the units, with the piping and interconnecting piping described as very complex. All of the piping and equipment must be inspected periodically. After crude is processed, products for sale are temporarily stored in tanks and eventually transported out

of the refinery through pipelines. The Canadian crudes, also known in the industry as "opportunity crudes," are poor quality, less expensive crudes that can increase a refinery's profitability. Ex. A12. Sinclair itself recognized that the corrosive nature of these crudes was a concern long before the September 1, 2011 rupture/fire happened. Ex. Q.

The downside to using the cheaper opportunity crudes is that they are highly corrosive and place greater demands on refinery facilities, especially on piping systems. Heavy sour crudes contain high amounts of naphthenic acid which can cause extensive damage to refinery piping systems, and can cause localized, accelerated corrosion greater than that caused by sweeter crudes. With higher naphthenic acid content, opportunity crudes can cause pipes to corrode by as much as 100 mils to over 200 mils per year.[2] There are different types of processes that might corrode and degrade a refinery's piping and equipment, much of which depends on the type and quality of the crude oil being processed. Sulfidation is one type of corrosion process that occurs inside a pipe as a result of a reaction between the pipe's surface and sulfur contained in crude oil. This is the generally expected corrosion mechanism that affects much of the piping in Sinclair's Crude/Vacuum Unit, including the vacuum tower slop oil 02-04-02 piping circuit at issue in this case. The characteristics of sulfidation are gradual thinning over time and fairly uniform thinning throughout a piping circuit. In other words, the various locations within a piping circuit are generally considered to corrode at similar rates by sulfidation. Sulfidation also results in an adherent sulfide coating on the inside surface of the pipe which acts like a barrier between the corrosive oil flowing through the piping

[2]A mil is one thousandth (.001) inches.

system and the steel wall so that it effectively slows down the rate of corrosion. Sulfidation would have been the expected corrosion mechanism operative in the 02-04-02 piping circuit at issue here as all available information indicated a fairly uniform pattern of thinning throughout the circuit.

Erosion corrosion is another corrosion process described in API 571 and is exacerbated by crude oils containing high levels of naphthenic acid. Erosion corrosion causes accelerated and generally localized corrosion because of the erosive actions of the oil flowing through a circuit. For this reason, API 570 directs placement of corrosion monitoring locations ("CMLs") at points on a circuit where flow changes, rather than straight runs. Crude oils that are more corrosive, such as those with more naphthenic acid, will increase the rate of erosion corrosion in a piping system.

Vacuum-unit piping such as the slop oil circuit 02-04-02, when exposed to naphthenic acids, can suffer from severe erosion corrosion and metal loss, depending on the particular variables of temperature, velocity, sulfur content, total acid number ("TAN"), and the concentrations of naphthenic acid within the piping circuit. Naphthenic acid corrosion is another form of corrosion that does not occur uniformly throughout a piping circuit. Instead, it may occur at discrete locations within a piping circuit and can occur when crude oil containing naphthenic acids, such as Canadian Cold Lake crude, is put through the system. Naphthenic acid corrosion is not predictable even when the TAN, the temperature, and velocity are known. Naphthenic acid corrosion is episodic, sporadic, and localized and can occur at rates of 200 mils per year and higher. No information was made available to Pro-Inspect that would have alerted it to any issues with this more aggressive corrosion mechanism.

However, there is no disagreement that the particular piping that ruptured had in fact

corroded and was thin pipe at the time and location that it ruptured in September of 2011. Whether that thinning and rupture in that location was caused by failures in performing the piping inspection nine months earlier was clearly contested. This requires the Court to consider what the parties' agreement for inspections encompassed in this case.

James Eggleston was a corporate project supervisor at the refinery at the time of trial. Initially, he was hired by Sinclair as an inspector and eventually he became the supervisor of the piping inspection department, and was the supervisor at the relevant times at issue in this case. The American Petroleum Institute has published standardized procedures governing inspections, including API 570, entitled "Piping Inspection Code: In-service Inspection, Rating, Repair and Alteration of Piping Systems." Joint Ex. 4. Eggleston was certified in 2008 as an API 570 inspector employed by Sinclair; all other full time inspectors reported to him. He testified that various third party inspectors were also hired at the refinery to provide inspection services, including Pro-Inspect, among others. Eggleston was responsible for directing Pro-Inspect's activities at the refinery prior to and after 2010 during turnarounds and gave instructions to inspectors.

Eggleston sought and received approval in 2010 to hire TechCorr and Pro-Inspect again for the update mechanical integrity (sometimes "MI" or "catchup") project because Sinclair personnel were unable to handle the big job presented by the catchup plan. Thus, contract workers were also used to help with the catchup inspections. Michael Fitzpatrick, a Pro-Inspect contract inspector at the time, was already onsite working at the refinery when the catchup plan began. Fitzpatrick was not then an API certified 570 piping inspector; he was certified for API 510 vessel inspection at that time. Fitzpatrick worked closely with and received instructions from Eggleston during this time

period.

Eggleston himself was an API 570 certified piping inspector and had a mechanical engineering degree from the University of Wyoming. He had inspection responsibilities in addition to supervisory duties. He arranged all piping inspections at the refinery. He was responsible for reviewing inspection reports for deficiencies, communicating deficiencies to the refinery's reliability engineers and unit inspectors, and for identifying and initiating corrective action. The inspection department at Sinclair was expected to develop and maintain the thickness monitoring program allowing for monitoring of internal corrosion in the piping systems at the refinery. Ex. A3, 6.3.1.

To facilitate the catchup project, in addition to Sinclair's own inspectors, as stated earlier, independent contractors were also engaged. Eggleston outlined the scope of the work he wanted done in the crude units in the beginning of the project and assumed those instructions would be passed on to Kiss by Fitzpatrick or others. He defined the scope of what he wanted inspected. The scope of work was orally given to Fitzpatrick to systemize, correct, circuitize, and perform visual inspections. Eggleston maintained that he had not undertaken the detailed planning of the project and that his plan was simply to get the units inspected based on needs he had identified. Eggleston acknowledged and agreed that he was responsible for the inspection work performed on the 581 and 583 units. Eggleston, as inspection supervisor, had supervisory authority over contract inspectors in addition to Sinclair's inspectors and he was responsible for all inspection work done at the refinery. At all times, Sinclair retained supervisory authority over contract inspectors' work.

Pro-Inspect was started as a family owned company in 1996, with its business described as the visual inspection of petrochemical equipment, including piping, pressure vessels, storage tanks in the refining and chemical plant industry. Pro-Inspect arranged for and coordinated contract API

certified inspectors and licensed technicians for many refineries needing inspections for piping, equipment, vessels and other assets. Under the contracts between Sinclair and Pro-Inspect, it was understood that Pro-Inspect would be providing API 570 inspectors, charging its customers an hourly rate for the work performed by its contract inspectors, dependent upon the inspector's experience, skills, and certifications. The API 570 certified inspector is the highest qualified employee, with the requisite years of experience and passage of the API test demonstrating knowledge of the code. Pro-Inspect charged Sinclair $72.77 straight time and $99.39 per hour overtime, for Josh Kiss, the API 570 inspector working on this project. Josh Kiss was employed by Pro-Inspect and provided services as directed by Sinclair at the job site once he began work at the refinery in January of 2011.[3]

When the catchup project was beginning, Pro-Inspect's certified vessel inspector, Fitzpatrick, was onsite at Sinclair, working on other projects. Eggleston had worked with Pro-Inspect and Fitzpatrick previously during the 2008 upgrade to the 581/583 units. During that time, Fitzpatrick had developed and used inspection work requests (IWR) to recommend immediate repairs based on inspection findings. IWR forms were presented to Eggleston for further consideration, a standard process at the refinery. Because of their favorable prior work relationship, Eggleston agreed to Pro-Inspect's Fitzpatrick's request to participate in the catchup inspection project. Eggleston and Fitzpatrick met in late November 2010 to discuss and plan the work on the MI catchup project. Work on the project included external visual pipeline inspection, calculating and placing CMLs on piping circuits, consistent with guidelines under API 570 § 5.6.3, among other things. Eggleston

[3]In Kiss's testimony, he stated he believed the hourly rate he was paid was $52 and that he was paid time and a half overtime (approximately 10-20 hours/week). Tr. VII, Kiss, 1394. These discrepancies are not significant to the Court's decision.

asked Fitzpatrick to have Pro-Inspect bring another API 570 certified inspector on board. Fitzpatrick was a certified vessel inspector, but did not then have API 570 certification.

Kiss was contacted initially by Brad Wells, of Pro-Inspect, regarding a job in Sinclair in January of 2011. Wells outlined the basic details of the job and asked if Kiss would be interested, with Kiss responding yes. Kiss did not recall specifically sending a resume to Pro-Inspect directly, and indicated that he had used different websites, some with recruitment companies, to learn about upcoming work. Kiss was later telephoned by Mike Fitzpatrick, who outlined the job in more detail saying that Sinclair was going to systemize and circuitize three different units in a six month long project, with two months per unit, and to perform any external visual inspections as needed. Kiss was interviewed telephonically by Fitzpatrick about work on the catchup project at Eggleston's request. After that interview, Kiss was called back by Brads Wells of Pro-Inspect about the job, and met with Wells and possibly others in Pasadena, Texas to discuss the job working at the Sinclair refinery. In January 2011, Kiss went to the Wyoming Sinclair refinery and reported for work as a Pro-Inspect API 570 contract inspector on the catchup project. He first reported to the safety council in Rawlins for a safety training course and clearance before he could begin work at the refinery. After that, Kiss went to the refinery, met with Fitzpatrick at the construction trailer and was given information about the scope of work. Fitzpatrick introduced Kiss to the TechCorr technicians and to Eggleston. To Eggleston, Fitzpatrick introduced Kiss as the inspector who would be picking up on systemizing and circuitizing and performing external visuals as needed.

Separate contracts were entered into with TechCorr and Pro-Inspect, with TechCorr charged with drafting isometric drawings and taking UT readings of the pipe. UT readings provide a snapshot of a particular piece of pipe at a particular location. Alone, UT readings are not singular tools for

identifying troublesome corrosion, but the data gathered with UT readings can be used to determine rates of corrosion over time by comparing earlier or previous UT measurements to newer, more recent UT readings. A corrosion rate is a predictive tool but is not designed to identify locations that are in the most urgent need of repair. UT readings are taken at designated locations and intervals and are used to calculate how much pipe wall is lost over time through corrosion. The same CMLs are used for repeat or subsequent measurements to generate meaningful corrosion data. Corrosion rates aid in estimating the remaining life of any particular piping system. This is calculated by determining how long it takes for a thickness reading to reach a predetermined minimum thickness, with the goal being replacement of piping prior to reaching that minimum thickness. Minimum thickness is defined by API 570 as the greater of pressure design thickness or structural minimum thickness, but a refinery may elect to utilize a higher thickness minimum value instead of code-defined minimum thickness values in determining useful life of piping, depending upon whether the policy at the refinery is conservative and how much risk is acceptable. In this case, Sinclair established a minimum thickness value for all piping systems equal to the piping pressure design thickness, which is the point where internal pressure would cause the pipe to rupture. For the 02-04-02 circuit, this is 0.004 inches.

Other tools are available, including radiography, that are also used to monitor piping system health. Radiography samples a larger area of a piping circuit than standard UT measurements and may be more effective when evaluating localized corrosion, such as that seen with the use of sour crude oil with high concentrations of naphthenic acid in heavy Canadian crude oil. Sinclair did not use radiography to monitor its piping systems.

In addition to visual inspections, an API 570 inspector might be expected to locate and

determine the number of necessary CMLs, and after inspection, to submit a report. TechCorr and Pro-Inspect worked hand in hand on the catchup project. Eggleston reported to John Rosacker, who was in charge of the Sinclair Process Management/Inspection Department. Eggleston was responsible for the refinery's inspection program and directed Sinclair's technicians and all of the refinery's contract inspector technicians. Eggleston directed Sinclair's refinery unit inspectors, the employees responsible for managing inspections of the crude units, and the activities of third party contract inspectors, including Pro-Inspect among others.

On January 1, 2010, Sinclair and Pro-Inspect entered into a written contract, which was subsequently extended through Pro-Inspect's work in 2011. Joint Ex. 3. The 2011 contract described the scope of work simply as follows:

> Pro-Inspect will provide API Certified Inspectors + NDE Techs to access [assess] piping and vessels as directed by Sinclair.

Joint Ex. 3, PI-1656. The scope of work language was copied by Pro-Inspect's Misti Jones in her own handwriting from a previous 2009 contract that had been entered into between Sinclair and Pro-Inspect. Jt. Ex. 2 ("Pro-Inspect will provide API certified inspectors & NDE technicians to assess piping & vessels as directed by Sinclair.") Jones was authorized to sign contracts on behalf Pro-Inspect. Jt. Ex. 2, PI-1558.

The contract further provides "Contractor shall perform the Work diligently and carefully in a good and workmanlike manner according to accepted standards of construction" and is an independent contractor with "full power and authority to select the means, methods and manner of performing the Work, being responsible to Company for all materials delivered and for the results contracted for." Joint Ex. 3, 1634. Excerpts from the deposition testimony of Steve Wells,

employed by Pro-Inspect between June 2006 and April 2012, were read into the record at trial. Wells was employed as coordinator and manager of field services for Pro-Inspect, coordinating and sending inspectors to refineries. He testified as to his expectations of API certified inspectors, to the professionalism expected of them, and to the expectation that they will exercise the judgment and expertise that accompanies API certification. They are expected to understand the API code, know where to find answers necessary to implement the code, and to work independently in a refinery.

Sinclair's Eggleston explained that he was responsible for arranging all of the inspections during 2011. Def. Ex. A3. Once the project began, Eggleston claimed he was not involved in the actual on the ground inspection of each circuit and that he received progress reports from Fitzpatrick in morning meetings. Eggleston claimed that he provided no additional direction about the project. Minutes of morning meetings discussing the project and its progress were received and are included at Pl. Ex. 13. However, at the refinery itself, Eggleston for Sinclair usually gave oral instructions to Fitzpatrick (who was then with Pro-Inspect) outlining the scope of work on the project and work that was to be accomplished. Oral instructions were shared with API certified inspectors daily or weekly, but those instructions were not written down. In other words, details as to the exact scope of inspection work to be accomplished were as provided and as directed by Sinclair.

The parties have disagreed about the scope of work for this project. Sinclair asserts its inspection supervisor, Eggleston, specifically told Pro-Inspect's lead supervisor, Fitzpatrick, that Sinclair wanted a "full API 570" inspection. Sinclair contends this would include review of ultrasound thickness data (UT data), placement of CMLs, calculation of the remaining life of piping circuits and verbally reporting problems that might be found. Pro-Inspect has asserted Sinclair only directed it to conduct external visual inspections of the exterior of the piping systems and related

supports and says that review and analysis of UT data was Sinclair's responsibility, working separately to review data collected by the TechCorr technicians. The Court agrees with Pro-Inspect.

GP Amerispect worked at the refinery from 1999 to 2004 and did some inspections in 2002. Between 2002 and 2008, there were no inspections on the 583 unit. Inspections were conducted by TechCorr in 2008; no corrosion rates were calculated from the 2008 inspections. The 2008 revamp of the 583 unit was completed in August of 2008. As explained briefly earlier, in 2010, Eggleston began planning for the 2011 catchup inspections, also called the MI (mechanical integrity) project; his plans anticipated several phases of work, and his catchup plan was approved by Sinclair. Joint Ex. 21. Eggleston stated in his November 17, 2010 email to Sinclair's Jim Larscheid, regarding the mechanical integrity catchup plan (Jt. Ex. 21):

> As you know, we have several phases of work to be completed for the Mechanical Integrity program to become functional.
>
> The first step is to start using the information that has been gathered. I would like to move the Sinclair personnel currently employed to a status of "Run and Maintain" where SWRC personnel will begin re-surveying areas of the plant and entering data into MaxiTrak on a daily basis. This would not only move the MI program forward, but allow scheduled time for SWRC's API certified inspectors to obtain the necessary on the job training for certification in NDE. Initially, I have stated a goal of one piping circuit or pressure vessel external inspection per day from each inspector not in the "Rover" position. This would include gathering the UT data and field walkdown, analyzing the UT data with past history and writing the inspection report in the MaxiTrak program. Issuing IWR's for repairs would be part of this process as well. Initially the unit priority will be based on the Shutdown schedule for 2011 in an effort to get data prior to shutdown on these units.
>
> Another phase is to get the units that have been radically revamped since the initial survey re-circuitized. The units included here are 581/583 Crude, 582 Crude, Reformer, and Hydrocracker units. Additionally, we have two small subsections of the alky complex that were skipped over in the initial survey effort, such as the cat-poly unit and the GRU. I would like to utilize contract personnel to perform these baseline surveys, consisting of one API 570 inspector, and three to four technicians based on workload. These areas will require revision to existing sketches and in

many cases complete new sketches, along with baseline UT data.

Both of these efforts will require support from insulation and scaffold personnel. The main support will be from the insulation personnel to install inspection ports in the piping, every effort will be made to place insulation ports in relevant locations that will be accessible without scaffold on a long term basis. I am sure that I can coordinate the scaffold support through the maintenance department, but it might be a smoother process if I had control of a subset of insulation personnel that can be coordinated by my department to facilitate workflow of the new systems.
The workflow has the following steps:
1.) Systemize the P&ID's and break into circuits.
2.) Send technician to sketch circuit.
3.) The API would calculate the number of CML's, and assign on drawing with input on accessibility from Technician.
4.) Assign package to technician to mark areas with paint on piping.
5.) Assign package to insulation crew for inspection port installation.
6.) Assign package to technical to gather UT data.
7.) The final step is data entry in to MaxiTrak. This can be accomplished two ways:
    a. By direct entry one circuit at a time, or
    b. By entering multiple circuits into a spreadsheet and sending to Canada for bulk entry.
I also envision a clerk to help put the information packages together.

Jt. Ex. 21.

Collected data was never entered into MaxiTrak system in a timely manner by Sinclair. The purpose of the program was to organize data and make information easily accessible and retrievable. The program was also intended to perform corrosion rate and remaining life calculations on piping circuits. The program had been purchased in 2007, but inspection data had not been entered into the program in 2011. The data management program was never implemented for Unit 583 for any time period relevant to this litigation, with Sinclair explaining it lacked manpower resources to do so. Sinclair inspectors were the only inspectors with access to the MaxiTrak program; contract inspectors did not have authority to use that program.

From his earlier work at the refinery, Fitzpatrick was familiar with the 2008 581 and 583 unit

upgrade project. That project had altered some piping circuits that previously existed when an earlier inspection was performed by GP Amerispect. For inspections of the pre-2008 upgraded piping, including the circuit in this case, Eggleston instructed Fitzpatrick to use the prior 2002 GP Amerispect inspection data when conducting the 2011 inspections. Fitzpatrick did not agree with Eggleston on the number of CMLs and had suggested instead that a CML calculation form he had used in work at other refineries be used during the catchup project. Eggleston said he thought GP Amerispect's placement of CMLs on the circuits was not adequate and said he told Fitzpatrick he wanted more CMLs placed on the circuits. Eggleston recognized that the code really did not provide a specific guideline on how many CMLs there should be. Eggleston stated that he had "developed a CML calculation form to, um, to settle that argument, I guess, to define a number of CMLs for each circuit based on the characteristics of the circuit, um, taking into account the length, the number of fittings, the corrosion rate, the number of deadlegs, all of these are factors in determining the appropriate number of TMLs for a particular circuit." Tr. Vol. II, 378.

So, Eggleston instructed that the CML Excel spreadsheet calculation form that Eggleston had developed be used to decide the appropriate placement and number of CMLs. There was no training on use of the form. Thereafter, the workflow for the catchup project began by segregating piping into manageable circuits, then moved to creating an isometric drawing of each circuit, locating CMLs, taking UT readings, analyzing the UT readings and expanding the scope of the inspections if so indicated by those readings, and preparing an inspection report for the circuit. Eggleston required the use of his CML calculation form by everyone on the project, including UT techs and inspectors, such as Fitzpatrick and Kiss. Interestingly, during trial Eggleston made mistakes himself when he discussed how calculations were to be made when trying to demonstrate proper use of this CML

calculation form. Subsequent to the fire at issue in this case, Eggleston began to hold specific training classes for inspectors to make sure that they understood how Eggleston wanted the form to be used. Eggleston said the calculation form was based on API 570 factors, including classification and material codes, total length, number of fittings, deadlegs and corrosion rates. Pl. Ex. 138. The CMLs GP Amerispect had previously placed on a circuit were to be entered on that form and retained so as to reflect corrosion between 2002 and 2011. If required, additional CMLs would provide baseline readings for future inspections.

API 570 5.6.1 states:

> CMLs are specific areas along the piping circuit where inspections are to be made. The nature of the CML varies according to its location in the piping system. The selection of CMLs shall consider the potential for localized corrosion and service-specific corrosion as described in API 574 and API 571. Examples of different types of CMLs include locations for thickness measurement, locations for stress cracking examinations, locations for CUI[4] and locations for high temperature hydrogen attack examinations.

Joint Ex. 4.

To accomplish this part of the project, at trial Eggleston said he wanted the form to be filled out by an API 570 certified inspector, which he testified required judgment calls and input of the inspector. In practice, the form was used by everyone on the project with information obtained during external visual inspection, new UT readings by TechCorr, and use of pre-existing data such as GP Amerispect's 2008 UT readings.

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[4]Corrosion under insulation, including stress corrosion cracking under insulation. API 570 3.2. Kiss described CUI as a program put in place in many facilities to determine the rates of corrosion under stainless and carbon steels in insulated piping, to establish suspect areas through piping systems, have insulation stripped, and conduct inspection under the insulation. Tr. V. VI, 1275.

API 570, at 4.3.4, addresses authorized piping inspectors, and provides:

> When inspections, repairs, or alterations are being conducted on piping systems, an authorized piping inspector shall be responsible to the owner/user for determining that the requirements of API 570 on inspection, examination, quality assurance and testing are met. The inspector shall be directly involved in the inspection activities which in most cases will require field activities to ensure that procedures are followed. The inspector is also responsible for extending the scope of the inspection (with appropriate consultation with engineers/specialists), where justified depending upon the findings of the inspection. Where nonconformances are discovered, the inspector is responsible for notifying the owner-user in a timely manner and making appropriate repair or other mitigative recommendations.
>
> The authorized piping inspector may be assisted in performing visual inspections by other properly trained and qualified individuals, who may or may not be certified piping inspectors (e.g. examiners and operating personnel). Personnel performing NDEs[5] shall meet the qualifications identified in 4.3.5, but need not be authorized piping inspectors. However, all examination results shall be evaluated and accepted by the authorized piping inspectors.

Joint Ex. 4.

API 570, at 5.6.3, discusses CML selection and indicates that prior data should be considered, with thickness measurements and knowledge of the process unit to "optimize the CML selection for each circuit, balancing the effort of collecting the data with the benefits provided by the Data." Joint Ex. 4. More CMLs can be selected for piping systems with any of the following characteristics:

> a) higher potential for creating a safety or environmental emergency in the event of a leak;
> b) higher expected or experienced corrosion rates;
> c) higher potential for localized corrosion;
> d) more complexity in terms of fittings, branches, deadlegs, injection points, and other similar items;
> e) higher potential for CUI.

API 570, § 5.6.3 continues:

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[5]Nondestructive examination. API 570, 3.2.

Fewer CMLs can be selected for piping systems with any of the following three characteristics:
a) low potential for creating a safety or environmental emergency in the event of a leak;
b) relatively noncorrosive piping systems;
c) long, straight-run piping systems.

CMLs can be eliminated for piping systems with any of the following characteristics:
a) extremely low potential for creating a safety or environmental emergency in the event of a leak;
b) noncorrosive systems, as demonstrated by history or similar services; and
c) systems not subject to changes that could cause corrosion as demonstrated by history and/or periodic reviews.

Every CML should have at least one or more examination points identified. Examples include:
–locations marked on un-insulated pipe using paint stencils, metal stencils, or stickers;
–holes cut in the insulation and plugged with covers;
–temporary insulation covers for fittings nozzles, etc;
–isometrics or documents showing CMLs;
–radio frequency identification devices (RFID).

Careful identification of CMLs and examination points are necessary to enhance the accuracy and repeatability of the data.

Corrosion specialists should be consulted about the appropriate placement and number of CMLs for piping systems susceptible to localized corrosion or cracking, or in circumstances where CMLs will be substantially reduced or eliminated.

Joint Ex. 4.

Additionally, API 570, § 6.1, states in part:

This code is based upon monitoring a representative sampling of inspection locations on selected piping with specific intent to reveal a reasonably accurate assessment of the condition of the piping.

Joint Ex. 4.

Locating CMLs is a function integral to an API 570 inspection and an API inspection under § 5.6.3 requires an inspector to consider UT thickness data and proper classification of piping and

corrosion risks, but may not always require placement of CMLs or always require more than an external visual inspection. Placement of CMLs is, as set out in § 6.1, necessary to get a reasonably accurate assessment of the condition of the piping. The code also suggests that sometimes consultation with a corrosion specialist may be appropriate. A visual inspection is a component of an API 570 inspection and includes a number of observations such as whether there are leaks visible, physical characteristics of piping in the field, condition of insulation, whether insulation is lagging, evaluation of vibration, evaluation of piping supports and whether they are in place and adjusted properly.

Section 3 of API 570, entitled "Terms, Definitions, Acronyms," at a note in § 3.1.36, states that NDE may be conducted by examiners at the discretion of the authorized piping inspector and become part of the inspection process, but the authorized piping inspector shall review and perform the results. However, the API Code is not a checklist or a prescribed recipe to follow for inspections of piping. It provides general guidance and guidelines for pipeline inspection which may vary according to need. As noted above, Eggleston himself was an API 570 certified inspector, and it was Eggleston who established the hierarchy, flow, and scope of work to be performed. Eggleston had directed inspectors to use his CML calculation form and had determined that the function of inspectors was to circuitize and systemize the circuit. The project, as outlined by Eggleston to Fitzpatrick, contemplated the initial inspection, entry of the data into Sinclair's data system, and subsequent evaluation of that data. Eggleston testified he did not provide Sinclair's Inspection Policy (Ex. A3) to Kiss or Fitzpatrick while they were working at the refinery in 2011. He also did not train Kiss when he began working at the refinery in January of 2011 about calculating CMLS under the Inspection Policy he had developed for Sinclair. If Eggleston required more than circuitizing and

systemizing of the API 570 inspections, his testimony clearly reflects his expectations were not communicated in writing or orally to any of the persons reporting to him during the course of this project. His after-the-fact attempt to redefine or rewrite the contract to include unspecified responsibilities or stretch the scope of work is unavailing.

The project began with the 581 crude and 583 vacuum units and was to later include the 582 crude unit, the reformer complex and hydrocracker unit. Kiss began working at the refinery January 17, 2011, after the catch up program was well underway. Kiss was instructed by Fitzpatrick that the Sinclair CML calculation form, an Excel spreadsheet, must be used by all API 570 inspectors, including Kiss,[6] and all of the UT technicians, to calculate CMLs for each circuit. Fitzpatrick's instructions were the instructions he had been given by Eggleston directing the use the Sinclair CML calculation form for these calculations. Kiss testified UT data was collected by TechCorr's employees, Malave or Hulsey, and reported on Sinclair's required Excel CML form. Kiss did not recall review of that UT data; he relied on the isometric drawings in conducting his inspection and reported the results of his API 570 external inspection, signing off on his various reports for inspected circuits. His report and recommendations for the 02-04-02 circuit are set out in the report at Joint Ex. 18. Kiss had no recollection that he played any role in adding CMLs on certain isometric drawings. During his testimony, he discussed the system and circuit tracking system, describing systemizing as "taking your different processes, and you're separating those. So where you have one

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[6]Kiss was employed by Pro-Inspect for approximately eight8 months, mid-January to mid-August. Six months of the eight were spent circuitizing and systemizing; he stayed on to continue doing external visual inspections on the piping for the additional two months extending into September. Tr. VI, 1288. Kiss says he left after that because he had fulfilled his original agreement, and did not like the facility; he said he felt it wasn't safe. Tr. Vol. VI, 1288-1289.

system might be methanol, and all of the piping within that methanol system you would break down into smaller increments called circuits." Tr. Vol. VI, at 1291.

Kiss stated he had been assigned to do systemizing and circuitizing and make external visual inspections and did not play any role in calculating CMLs. Calculations for circuit inspections were received after input of data into Sinclair's own Excel CML spreadsheet, as instructed by Sinclair. Per Sinclair's instructions, the CML calculation form provided the means by which the number of CML readings to be taken on a circuit were to be determined, based on input of data, including CML readings from prior inspections, new and additional readings after placement of additional CMLs, if necessary, and identified piping classifications and fluids in the circuits, using information supplied by Sinclair. For purposes of piping inspections, corrosion rates in mils per year were assumed to be less than 2 mils per year. Kiss's report for the 02-04-02 circuit sets out the results of his 570 external visual inspection observations. It states "SCOPE: An external visual inspection of insulated circuit 02-04-02 was performed per API 570 piping inspection code, and Sinclair piping material specification P31E."[7] His report also included, for example, identification of areas where there was damaged or missing caulk, insulation jacket damage, steam trace leaks, insulation breaks or missing cap on insulation, areas of inadequate support and vibration, and missing CML port plug. The report covered external visual inspection of the insulated 02-04-02 circuit performed per the API 570 code and Sinclair piping material specification P31E. The report includes recommendations and notes of repairs made or recommended, as well as reference photographs. No repairs were made at the time of inspection. Jt. Ex. 18. Kiss's clean isometric drawing is at Jt. Ex. 19.

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[7]Each Piping Inspection Report signed off on by Kiss included a substantially similar description of scope of work for circuits for external inspection or external visual inspection. See e.g., Ex. Z-6.

Kiss indicated that once the reports were completed, they were filed in the Sinclair filing system. When a unit inspection was completed, all of the reports were transferred to Eggleston, as owner/user and API 570 inspector for Sinclair. Kiss believed reports would be reviewed by Sinclair, and repairs would then be planned and made by Sinclair as required. If reports were of active leaks at valve or actual chemical process leak (not steam trace leaks), Kiss said he would report them directly to operations, the area responsible for running, repairing and maintaining the units. It was Kiss's understanding that the data collected by TechCorr and reports were filed and stored in bankers' boxes until ready to be shipped by Sinclair to Canada to be processed to determine the corrosion rates for those circuits. Kiss stated that "as far as I knew, once everything was turned over from Pro-Inspect, or from any inspection firm on site to Sinclair, it was in their [meaning Sinclair's] hands." *Id.* at 1287. Kiss testified that during the time he worked at the refinery systemizing and circuitizing and performing external visual examinations between January and June, he saw Eggleston about once a week. Eggleston would pop in and check on things and see how they were going. There were no complaints and Kiss believed things were proceeding as expected.

Kiss did offer that he was there to provide additional support for the UT techs, if needed, and was always available. Kiss did not do any CUI (corrosion under insulation) inspection, and he understood Sinclair was not going to perform or fund a CUI program. "I was given a specific scope, which was to perform an external visual inspection, and, uh, I had made a few inquiries, nothing specific, but pertaining to a possible CUI inspection, and the return that I got was that, no, Sinclair will only perform a, an external visual." *Id.* at 1335. Kiss consistently stated that the scope of work he was to perform was limited to visual external inspection, as instructed by Pro-Inspect's project leader, Fitzpatrick, whose activities in turn were supervised and directed by Sinclair's Eggleston.

Fitzpatrick testified that Eggleston directed Pro-Inspect's work and that they had been instructed by Eggleston to perform two tasks: (1) systemize and circuitize Sinclair's piping and (2) perform external visual inspections. Fitzpatrick Depo. 40 ("I was given the scope of work by J. R. Eggleston to systemize and circuitize piping P&IDs[8] and perform visual external inspections only."), at 41 ("[T]hey hired Josh Kiss [as the API 570], who in turn come in to systemize and circuitize the piping P&IDs and perform external visual inspections."), at 53-54, 66 ("His exact words, that we were to systemize and circuitize the P&IDs and perform visual inspections. TechCorr will take care of the UTs."); at 67 ("We had two tasks. I can remember systemize and circuitize P&IDs, perform the visual inspections. TechCorr will take care of the UTs."). Eggleston had organized the progression of work flow to systemize and circuitize the work, inspections, and entry of data into the company's electronic data management system, along with review and analysis of the data. Although he asserted he wanted an API 570 inspection, Eggleston's testimony was somewhat ambiguous as the scope of work he had actually requested and directed, little of which, if any, was memorialized in writing in the pertinent contract or otherwise. Eggleston never told Kiss or Fitzpatrick that it was their specific responsibility to review the TechCorr UT readings. To the contrary, Eggleston indicated that after Fitzpatrick had been hired as a direct employee of Sinclair, one of Fitzpatrick's functions, along with Eggleston, was to review inspection reports. Eggleston never told Fitzpatrick or Kiss to analyze UT data. Fitzpatrick stated that the boxes of reports that included reports for the 02-04-02 circuit were located in his office across the hall from Eggleston's office. Later, when Fitzpatrick was an employee of Sinclair, Fitzpatrick said he wanted to review

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[8]Process and instrumentation diagram, a drawing showing a section of the refinery and sketching out various flows and connections in that section. Tr. Vol. II, 361.

and go through those inspection reports and files before turning them over to Eggleston; Eggleston expected Fitzpatrick to perform that task. API 570, at 5.5.4, does not explicitly require review of UT thickness data as part of an external visual inspection. Jt. Ex. 4.

Eggleston had no recollection if that occurred before Fitzpatrick left Sinclair's employment, but said that if Fitzpatrick had not done so, the responsibility for reading those files and reports would have fallen to himself or John Bergeson, another Sinclair employee. Most of that review never occurred until after the September 1, 2011 fire. The fact is that the computerized data input and use of the MaxiTrak system was never utilized as contemplated prior to the September 2011 fire.

Fitzpatrick, who later became API 570 certified but was an API 510 certified vessel inspector at the relevant times, stated in his deposition:

> Q. So I'm wondering, Mr. Fitzpatrick, then, if the project required a 570 inspector, why it was that there were approximately four months without a 570 inspector for the project?
>
> A. Because --
>
> ...
>
> A. – systems – systemizing and circuitizing takes time. You can't go perform external inspections on piping just walking through the unit. You have to have systems and circuits established. And that requires a 570. So the systemizing and circuitizing does not require you to be an API 570. Performing visual inspections does. So with that being said, the P&IDs were being systemized and circuitized and gathering of information from J. R. Eggleston.
>
> Q. (By Ms. Brimmer) So do I understand your testimony to be, then, that the nature

of the work performed during the months of August, September, October, November and December were the systemizing and circuitizing of the P&IDs?

...

A. Yes.

Q. (By Ms. Brimmer) And the external visual inspections that you've referred to in your testimony did not begin until January when Mr. Kiss arrived?

...

A. Correct. Yes.

Q. (By Ms. Brimmer) And once Mr. Kiss arrived, what was your role during that time that you and Mr. Kiss overlapped?

...

A. My role went to the equipment files.

Q. (By Ms. Brimmer) And what do you mean by the equipment files?

A. All equipment that exists in Sinclair Refinery. They have files for each one of these pieces of equipment that has certain data in them.

Q. Where were those files located?

A. They were located in the main engineering building.

Q. So once Mr. Kiss arrived, do I understand that your responsibilities shifted somewhat?

...

A. Not somewhat. They shifted.

Q. (By Ms. Brimmer) Okay. Fair enough. So they shifted to you being in the file

room that's located near the engineering department.

A. Correct.

Q. And what were you doing with those equipment files? Were you reviewing them?

A. I was reviewing files, making sure they had certain documentation.

Q. And this was in connection with a PSM audit?

A. Yes, ma'am.

Q. And who was supervising you on this project?

A. John Rosacker, J. R. Eggleston.

Q. Were you interacting at all with Mr. Kiss during this time?

A. At the beginning --

...

A. – I gave Josh Kiss the same direction that J. R. Eggleston gave me. Systemize and circuitize P&IDs, perform visual inspections, and TechCorr would take care of the UT. At that time, I rolled over to the inspection or the equipment file project, as you might say. And that's when the whole transition of me becoming Sinclair became. . . .

Fitzpatrick Depo., 70-74 (counsel's various objections to form omitted).

J. Robert Sims discussed API 570, in the context of the governing contract between Sinclair and Pro-Inspect. His testimony is consistent with, and elaborates on, the notion that a contract may provide for specifically defined services or inspections, as occurred in this case. He reviewed the contract with Pro-Inspect and agreed that the scope of work was determined and directed by Sinclair.

Sims also reviewed the MI catchup plan crafted by Eggleston that described the workflow of that plan. UT data was to be gathered by technicians (TechCorr in this case) and entered directly into the MaxiTrak database and system. Because neither TechCorr nor Pro-Inspect were authorized to access the MaxiTrak database, of necessity, Sinclair would have had to enter the data and information from reports into that system which would all be run through that computer program for analysis. Sinclair did not get that data and other information entered into its system for analysis during the relevant time frames. Sims opined that, after review of the contract, API 570, and deposition testimony, Kiss's responsibilities were those necessary to satisfy API 570 with respect to visual external examination and location or placement of CMLs. The contract did not require Kiss to perform unassigned tasks. Responsibility for tasks not assigned to Kiss would have fallen to Eggleston (or Bergeson) as the authorized certified 570 piping inspector in charge of inspection. Kiss provided the visual external examination and met the requirements of API 570 for the assigned task. Kiss reported nonconformities in his visual examination reports, which also included repair recommendations in some cases. The visual inspection reports should have been evaluated by Sinclair's Eggleston or Bergeson when they were available on paper or after data entry and analysis into the MaxiTrak program. However, that did not occur prior to the fire in September of 2011.

Among other things, Sims noted that the information he had been provided for review indicated that Fitzpatrick and Kiss were directed by Sinclair's Eggleston to use classification codes developed by GE Amerispect in 2001 or 2002; they were instructed to calculate CMLs using the form developed by Eggleston, in the manner Eggleston directed and using existing data, also as directed by Eggleston. Sims considered Sinclair's litany of failures by Kiss and Pro-Inspect, including, simply by way of example, the alleged failures to review or evaluate UT measurements,

alert Sinclair of nonconformances shown in UT measurements, extend the scope of inspection based on findings shown in UT measurements, but recognized that Kiss had not been assigned those tasks and it was not Kiss's responsibility to look at UT data or extend the scope of inspection. Eggleston for Sinclair would have been the primary person with authority and responsibility to consider those deficiencies to determine how to address them. Unquestionably, Sinclair has asserted that Kiss had the obligation and authority to extend or modify the tasks he was assigned to perform. However, the agreement between Sinclair and Pro-Inspect required Kiss to perform visual external examinations consistent with the parameters of API 570. He was not required to perform tasks other than those encompassed in the contractual agreement, as assigned to him by the Sinclair certified API inspector, Eggleston, who identified and supervised the work Kiss was asked to do. Sims, Tr. Vol. V, 894-971. Sims opined that Kiss did comply with the API 570 requirements of the contract. Sims also acknowledged that while numerous tasks and modes of inspection are delineated and encompassed in API 570, the contract defining the scope of work governed what tasks Kiss was expected to accomplish pursuant to that contract. This is a proposition the Court agrees with.

The Court finds that Sinclair required Pro-Inspect's API 570 inspector Josh Kiss to systemize, circuitize, and perform visual inspections as directed and assigned by Sinclair. That was the work Kiss in fact performed. After that work was performed, Sinclair's employees would then take on the task of recording and evaluating the data collected. Sinclair did not complete that task nor did it read any inspection reports until after the September 1, 2011 fire. The contract between Pro-Inspect and Sinclair was satisfied.

Even if the Court was convinced that the contract required something other than as described above, (and it is not so convinced), it is unclear whether the information reflected in the reports and

data obtained and included in the inspection reports would actually have disclosed that the particular piping line in the 02-04-02 circuit was so thin that a rupture was imminent and immediate replacement of the piping was required. Sinclair's Hansen testified that if he had been aware of the readings and data from the inspection on January 22, 2011, he would have taken further measures at that time and replaced the pipe, which he said could have been accomplished without shutting the refinery down. In the Court's view, this testimony was somewhat self-serving and quite speculative, consisting primarily of a personal belief that if the pipe had been replaced earlier it would not have burst as it did. It does not explain Sinclair's failures to review information it actually already had.

The expert testimony received and heard at trial did not persuade the Court that Sinclair would have taken any action to replace pipe or that it would have done so before the rupture in September 2011. What all of the expert testimony did reveal is that there is significant variance in how the standards and guidelines embraced in the API codes are applied and utilized within the industry. For instance, two experts offered divergent opinions as to probability the pipe would have ruptured as it did would have changed with different number and/or placement locations for CMLs on the circuit. Dr. Caligiuri, plaintiff's expert, testified that 46 CMLs placed approximately every 2 feet in an 80 foot stretch of piping on the circuit would have been appropriate, rather than the 11 or 13 that were already in place. Dr. Casey testified that the calculation and placement of the 11 CMLs on the circuit was proper. However, neither expert's testimony was such that the Court was persuaded that the thinness of the pipe at the point of rupture in the 02-04-02 circuit would have been more likely to have been discovered during inspection with the placement of more CMLs or would have prompted immediate repair or replacement of the piping.

Sinclair's expert, Dr. Caligiuri, opined that the rupture occurred when extensive localized

wall thinning caused the pipe to become sufficiently thin that it could no longer withstand the internal pressure associated with normal operation. Dr. Caligiuri testified that if the correct number of CMLs had been calculated and placed that the inspection team would have found the thin piece of pipe. Dr. Caligiuri suggested that at least one of the additional CMLs would have actually been placed on the piece of pipe where the actual rupture occurred. Dr. Caligiuri asserted that if the inspections on the circuit had been expanded, Sinclair would have been able to prevent the September 2011 fire. Dr. Caligiuri recognized and stated that the API code is not a "cookbook." However, he opined that Kiss's inspection was not sufficient because he failed to calculate and locate CMLs without considering UT readings and prior inspection data. He believed the inspection performed did not really assess the condition of the pipe, and that caused Sinclair to lose the opportunity to identify a problem and have the circuit removed before the September 1 fire. Dr. Caligiuri did opine about ideal 570 inspections; he did not include in his assessment of the Kiss inspection that Sinclair's contract with Pro-Inspect was for visual external inspection, as contemplated by the catchup project plan crafted by Eggleston. It appears that much of Dr. Caligiuri's opinion was based upon representations made to him by Eggleston about what he had told Pro-Inspect he wanted in connection with this inspection and of the work to be performed. Dr. Caligiuri's discussion of his understanding of typical API 570 inspections, combined with what he learned from Eggleston, may support his ultimate opinion. Standing alone, his opinion is understandable. However, the evidence presented to the Court at trial, including the testimony of Eggleston, Fitzpatrick, Josh Kiss and others, and documentary evidence, reflects that the inspection required at the time was an external visual inspection, with other work, including data entry, review, and repairs if required to be performed at a later date. This undercuts the validity of Dr. Caligiuri's

opinion that the inspection performed was not adequate, with the result that the thin pipe was not replaced or repaired prior to the September 2011 rupture.

Pro-Inspect's expert was Dr. Casey, whose expertise was in failure analysis, mechanical integrity investigations and metallurgical analysis. Dr. Casey reviewed the same materials reviewed by Dr. Caliguiri, but reached different conclusions. Dr. Casey's opinion was that the failure of the pipe was not foreseeable based upon the data available to Pro-Inspect, and further, that if Pro-Inspect had analyzed UT data in the manner Sinclair has suggested it should have done, the remaining life of the piping circuit would have been either 14 years or approximately 7 years depending on standards used. Dr. Casey opined that the piping in the relevant circuit was not thin and that, against objective standards like API 570 and 574, the 0.137 value would indicate that pressure design and structural minimum was well above the value defined by API 574 as alert thickness. He opined there was nothing to support the assertion that the 0.137 measurement would have prompted immediate replacement of the pipe. Dr. Casey testified that if the number of CMLS had been increased it was unlikely that a CML would have been placed on the vertical section of the pipe in the area of the rupture because of API 570 guidance and because the Sinclair CML calculation form gave a high preference for placement of CMLs at fittings, locations in a piping system potentially susceptible to accelerated corrosion. To conclude that the addition of more CMLs on the particular line would have increased the discovery of the point of rupture leading to the September 1, 2011 fire would be speculative, particularly given the calculated remaining thickness measurements were not such that immediate replacement would have been appropriate.

Sinclair switched to the use of a more corrosive Canadian Cold Lake Crude oil in September of 2010. This information was not shared with the contract inspectors. Information supplied by

Sinclair to any inspector or tech working on the catchup project was incomplete and often erroneous. By way of example and not as an exhaustive listing, other problems included incorrect piping circuit and service classifications, improper use of the CML calculation sheet, corrosion rates were not assumed, and remaining life for equipment was not calculated appropriately.

Pro-Inspect placed a great deal of emphasis on the switch to Canadian Cold Lake Crude in September 2010 as a possible factor contributing to accelerated corrosion in the piping system. The testimony and evidence demonstrated that the use of Canadian Cold Lake crude oil in September of 2010 could have caused the piping to erode at an accelerated rate between the time it began to be used in September of 2010, continuing through the period including the January 2011 inspection and on through the period up to the September 1, 2011 fire that occurred after the piping ruptured. Sinclair's awareness that this change in product source was likely having deleterious consequences and impacts on its equipment is evident when events occurring after January 2011 are considered.

Sinclair's 30(b)(6) designee, Moote, testified in his deposition regarding metallurgy in the slop wax line, considering the corrosive nature of material, corrosion capabilities in the crude stream, and temperature. He testified sometimes sulfur can be a corrosion inhibitor with naphthenic acids; each stream and each condition must be evaluated, a determination made as to what is corroding or not corroding and when it should be replaced. If replacement is determined to be appropriate, the type of material to be used to replace materials then in service would be based upon the cause of corrosion or the cause of thinning. Different metallurgy may be required for different situations. Moote indicated that Sinclair began processing Canadian Cold Lake crude in about mid-2010 as part of the crude mix through perhaps as late as June 2011. After that, it was not used as part of the crude being processed as Cold Lake crude had a higher sulfur content than the assay showed and was

loading up sulfur plants and hydro treaters more than anticipated. "It also had more bottoms to it, which created more feed for your coker, which we didn't anticipate, so we moved from that crude to other crudes that would fit our configuration better." Tr. Vol. VII, 1478.

In early 2011, Sinclair was considering and discussing possible use of a GE program offering called the Predator Assessment. The program was designed to assess and consider, among other things, napthenic acid corrosion control and monitoring. Joint Ex. 59, which was dated February 2, 2011, with the subject line "Predator Monitoring Proposal" from GE to Sinclair, with attention to Gregg Byers, Bob Portz and Ray Hansen, outlined plans for sample collection for analysis in the initial Predator Monitoring Program. GE did do some preliminary hydrocarbon analysis for the 581/583 crude unit, a study designed to identify corrosion risks and possible means of mitigating those risks and a preliminary report in April of 2011. Jt. Ex. 56; Ex. V-13. On September 23, 2011, after the incident giving rise to this litigation, GE submitted to Sinclair its 581/583 Predator Assessment report. "The primary scope of the Predator Assessment is to evaluate the impact of processing opportunity crude oils like WCS and Cold Lake on the physical assets of the refinery 581 crude and 583 vacuum units." Jt. Ex. 57, 96183. In that September 23, 2011 assessment, GE made recommendations and gave warnings about the use and processing of Canadian Cold Lake crude oil. Jt. Ex. 57. The GE September 23, 2011 assessment continues,

> ... the thinning occurring on the internal surface of the T5 low-alloy steel pipe was likely caused by an erosion corrosion mechanism. Erosion corrosion is the accelerated attack of a metal component because of the relative motion between a fluid and the metal surface. Metal is removed from the surface as dissolved ions, or forms solid corrosion products, which are mechanically swept from the metal surface. High temperature corrosion mechanisms such as naphthenic acid formation or sulfidation (sulfidic corrosion) may have been involved in the attack. In addition to the chemical factors, the velocity in the location where this sample was installed in the line may also be relevant to the overall erosion mechanism. Areas of high

velocity and turbulence lead to greater metal wastage rates. At temperatures of 650-700°F, metal loss rates by sulfidic corrosion would approach 0.007-0.014 inch/yr. (7-14 mpy) in T5 low-alloy steel depending on sulfur content (see Appendix). The presence of hydrogen may also increase sulfidic corrosion rates. Page 4

The conclusions of the assessment include:

1. The internal metal wastage on the pipe sample from the Slop Oil Line of the Vacuum Unit was likely caused by an erosion corrosion mechanism. Micrometer measurements indicated a minimum and maximum wall thickness of 0.007 and .032 inches. The original wall thickness of the piping was not known.

2. The velocity in the location where this sample was installed is directly related to the overall erosion/corrosion mechanism. Areas of high velocity and turbulence lead to greater metal wastage rates.

3. Erosion corrosion is usually associated with naphthenic acid formation in high temperature refinery operations and was likely involved in the attack. Sulfidation is also possible. It is recommended that a review of slop oil be conducted along with the determination of the total acid number (TAN) and naphthenic acid number (NAN) to better understand the cause of damages in this piping.

4. To mitigate high temperature corrosion in this slop oil line it may be necessary to use a suitable corrosion inhibitor treatment program or up-grade to stainless steel piping. 304 and 316 austenitic stainless steels offer superior resistance to sulfidic corrosion at temperatures up to 750° F. Naphthenic acid attack may be mitigated by using higher molybdenum content austenitic stainless steels such as 317.

Jt. Ex. 57, SWRC096246.

Other problems make it difficult to assess whether Pro-Inspect's alleged failures, if there were any, caused the damages Sinclair claims that it suffered. After the fire, a 6 inch piece of pipe was taken from a larger 2-1/2' to 3' section of pipe between the flanges on the south side of the slop oil loop and was sent by Federal Express to GE. Rosacker, who sent the pipe sample to GE, did not contact or write GE to request that the pipe be maintained after completing its analysis. A second piece of pipe evidencing the actual failure of the pipe wall was given to Dan Bulkley and George Zak of the Wyoming OSHA office at the beginning of their investigation after the fire. Bulkley stated

they then kept the piece of pipe onsite in the trailer at the refinery under lock and key. After OSHA had concluded its investigation and left the Sinclair site, in September and October 2011, the pipe remained in the trailer for some period of time, although Bulkley recalled that the last time he saw the pipe it was in the back of Rosacker's pickup. Pl. Ex. 15 (photos – Bulkley). At the time of trial, and even before this litigation commenced, the pipe was lost or disposed by Sinclair, perhaps taken to the "boneyard" where Sinclair puts old equipment and piping out to pasture, which might later be sold to junk dealers as salvage. It was never made available to Pro-Inspect or its experts for analysis and evaluation.

Following the fire in September of 2011, a "lessons learned" memo was prepared by Eggleston. Jt. Ex. 15. There are numerous statements in the lessons learned memo that cause the Court to take a skeptical view of Sinclair's claims in this case, and that also reveal Sinclair's inability and failure to communicate and direct activities at the refinery clearly and failure to capture its actual contract requirements in the pertinent agreements for inspection and assessment of the piping in the circuit. The September 14, 2011 memo stated "[d]uring the initial investigation phase of the 583 fire that occurred on 9/1/11, the focus turned to the inspection department and highlighted several failures in our system. This fire should not have happened, SWRC inspection failed to do the job properly. . . ." The memo written by Eggleston continues:

> 1.) The circuit that failed was improperly classified per API 570. This particular line was partially classified as class 2 by GP Amerispect in 2001 and partially as class 3 piping. This portion of the data was not questioned when the unit was re-circuitized and systemized late last year. The review process failed to take into account that this system runs at a temperature high enough for auto-ignition when exposed. The entire line was assumed to be API 570 class three piping based on the fact that two of the three GP Amerispect circuits incorporated in the new single circuit (02-04-02) were class three and the remaining circuit class two.

Lesson 1 – never assume that the job was done right the first time, take the time and make the effort to analyze and verify the classification is correct, especially when the entire unit is to be re-circuitized and systemized. If you are unsure about the classification, ask Tech Services, Engineering, Operations to sit down and help determine the severity and criticality of the service.

2.) The CML calculation sheet that is used to determine the number of CML on a particular circuit was not used properly. A corrosion rate was not assumed for this calculation, which is necessary to determine an adequate starting number for CML.

Lesson 2 – Correctly use the tools provided for the job. If the number of CML feels wrong, it probably is wrong. If you are consistently getting results that feel wrong, take the time to ask questions about the process. Do NOT just scratch out the calculation result and put in a number that matched what was there or feels right.

3.) Erratic or low readings were not followed up on by the 570 in charge of the piping project. The low readings were flagged by the technician. While the calculations indicated a moderate corrosion rate of 8-9 mpy, referring this value back to the CML calculation sheet would have triggered more inspection points to be placed on the line and perhaps flagged this line for immediate replacement.

Lesson 3 – Calculate a remaining life for every piece of equipment inspected. With every report, if the corrosion rate is higher than expected, gather more data. As a certified inspector, you have been trained and tested for your ability to do these calculations.

4.) This data sat in a box for nine months and was not properly reviewed until an accident occurred. We cannot fix what we do not know about. After reviewing all of the reports, several were identified that mentioned active leaks on process piping. The notification process is fairly well defined here at SWRC. You will all receive training on how to notify SWRC personnel of a potential problem.

Lesson 4 – Make sure everyone associated with the inspection department at SWRC is trained in the IWR process.

5.) Lack of SWRC oversight. No data was reviewed until after the accident. This is not acceptable.

Lesson 5 – Do not get offended when someone wants to look over your work and review it. In fact I encourage you to ask someone else to review the data before it is turned in or filed. Everyone is capable of missing something, but everyone is capable of catching something that was missed.

After trial and consideration of the evidence and testimony, the Court finds that Sinclair has failed to show by a preponderance of the evidence that Pro-Inspect breached the contract and has failed to show that the January inspection of the 02-04-02 piping circuit was not performed in accordance with the underlying agreement between Sinclair and Pro-Inspect. The tasks required by the contract were in fact performed, as directed by Sinclair. The Court finds that Pro-Inspect did not breach the contract, as alleged by Sinclair. Sinclair got what it bargained for. Additionally, Sinclair has failed to show by a preponderance of the evidence that Pro-Inspect was negligent in performing the piping inspection and failed to show by a preponderance of the evidence that its claimed damages were caused by Pro-Inspect's alleged negligence. Along with the contract claim, Sinclair's negligence claim against Pro-Inspect fails.

Conclusions of Law

1. Any finding of fact which includes a conclusion of law is incorporated herein.

2. The Court has diversity jurisdiction under 28 U.S.C. § 1332(a). Venue is proper in this Court pursuant to 28 U.S.C. § 1391(a). Jurisdiction and venue are not contested.

2. In a diversity case like this one, "except in matters governed by the Federal Constitution or by acts of Congress, the law to be applied in any case is the law of the state." *James River Ins. Co. v. Rapid Funding, LLC*, 658 F.3d 1207, 1216–17 (10th Cir.2011) (quoting *Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78, 58 S.Ct. 817, 82 L.Ed. 1188 (1938)). The Court applies Wyoming substantive law to all liability and damages questions in this case.

3. A breach of contract claim in Wyoming consists of the following elements: (1) a lawfully enforceable contract, (2) an unjustified failure to timely perform all or any part of what is promised

therein, and (3) entitlement of the injured party to damages. *Halling v. Yovanovich,* 391 P.3d 611, 616 (Wyo. 2017), quoting *Schlinger v. McGhee*, 268 P.3d 264, 268 (Wyo.2012); see also *Morrow v. Xanterra Parks & Resorts*, 925 F. Supp.2d 1231 (D. Wyo. 2013).

4. There is no dispute that the parties have a valid contract, satisfying the first element. However, there has been no unjustified failure to timely perform all or any part of what was promised in that contract. Pro-Inspect performed as instructed and in accordance with the parties' agreement. The plaintiff has failed to prove the second element by a preponderance of the evidence.

5. As to the third element, even if Sinclair had proved that Pro-Inspect breached the contract, which it has not, Sinclair has failed to prove that a breach of contract by Pro-Inspect was the cause of damages claimed to have been suffered as a result of the September 1, 2011 fire. The plaintiff has failed to demonstrate its entitlement to recover damages in this case, failing to prove the third element of the contract claim by a preponderance of the evidence.

6. The plaintiff, Sinclair, is not entitled to recover damages from Pro-Inspect on its claim for breach of contract. Pro-Inspect is entitled to judgment in its favor of the breach of contract claim asserted by Sinclair against Pro-Inspect.

7. Plaintiff's negligence claim fails for several reasons. In the usual case, in order to state a claim for negligence, a plaintiff's factual allegations must establish the following elements: "'(1) the defendant owed the plaintiff a duty to conform to a specified standard of care; (2) the defendant breached the duty of care; (3) the defendant's breach of the duty of care proximately caused injury to the plaintiff; and (4) the injury sustained by the plaintiff is compensable by money damages.' *Birt v. Wells Fargo Home Mortgage, Inc.*, 75 P.3d 640, 658 (Wyo. 2003)." *Angell v. Freedom Mortgage Corporation*, 2016 WL 9453335, *5 (D. Wyo. 2016); *Hebert v. Sinclair Oil Corp.*, 2016 WL

9450460, *4 (D. Wyo. 2016), citing *Valance v. VI–Doug, Inc.*, 50 P.3d 697, 701 (Wyo. 2002); *Clark v. Keller Transport, Inc.*, 644 Fed. Appx. 846, 851 (10th Cir. 2016) (the same, quoting *Loredo v. Solvay Am., Inc.*, 212 P.3d 614, 630 (Wyo.2009)).

8. The duty of care is defined by the parties' contract; the Court found the contract was not breached by Pro-Inspect. Sinclair also failed to prove by a preponderance of the evidence that the alleged breach proximately caused the claimed injury and damages. Sinclair claims that the contract was breached when Josh Kiss and Pro-Inspect failed to do a proper API 570 inspection of the piping in January of 2011. The Court has already determined that Sinclair directed inspections and Pro-Inspect, and Kiss, performed as directed. The fire occurred in September of 2011. The expert testimony offered by all the parties failed to demonstrate that the inspection, even if performed as Sinclair has claimed, was the cause of the fire and resulting damages in September. Clearly, corrosion and thinning of pipe occurred. However, none of the evidence and testimony heard by the Court proved by a preponderance of the evidence that the fire nearly nine months later would not have occurred if additional CMLs had been placed or the API 570 inspection had been performed differently. The assertion that Sinclair would have replaced the pipe immediately is self-serving, and clearly inconsistent with the recognition that Sinclair's own failures contributed to the cascade of problems that could be regarded as significant contributors to the September 2011 fire. While there are threads that could be used to weave a logical explanation, the woven explanation remains speculative. Plaintiff is unable to prove by a preponderance of the evidence the alleged breach of a duty caused the damages it claims to have suffered. One must speculate that what might or might not have happened if the January inspections had been done differently or the parties' agreement clearly required more than an external visual inspection. One must speculate that there might have

been a different outcome and the pipe rupture and fire would not have occurred. This is not sufficient to support any decision finding that Sinclair is entitled to an award of damages as a result of negligence on the part of Pro-Inspect.

9. Additionally, the economic loss rule bars recovery in tort when a plaintiff seeks purely economic losses unaccompanied by physical injury to person or property. *Rissler & McMurry v. Sheridan Area Water Supply Jt. Powers Bd.*, 929 P.2d 1228, 1234 (Wyo. 1996). Here, Sinclair has claimed business interruption and property damages, which are economic losses within the meaning of the rule. This includes the loss of profits and business interruption damages Sinclair seeks to recover here. There is no duty in this case that Pro-Inspect is alleged to have breached that is independent of the contract at issue in this case.

10. This Court has had an opportunity to discuss the economic loss rule in another recent case, also involving Sinclair. *Sinclair Wyoming Refinery Co. v. A&B Builders, Ltd.*, United States District Court for the District of Wyoming, Case No. 15-CV-91-ABJ, Doc. 241. While the instant case is distinguishable, some of the analysis in *A&B Builders* is helpful. In that case, the moving party argued that Sinclair was improperly seeking to pursue tort causes of action without alleging violation of a duty independent from the parties' contract. In *A&B Builders,* the Court acknowledged the difficulty that exists in examining the independent duty rule apart from the economic loss rule:

> A. The Independent Duty Rule in General
>
> In order to resolve the Motion, the Court must apply Wyoming's independent duty rule. Unfortunately, it is difficult to examine the independent duty rule separate from the economic loss rule as the Court has not found a Wyoming case that deals with the two separately. Furthermore, Sinclair has relied on the presence of economic loss in many of the cases below as a distinguishing factor.
>
> The Court will begin by examining the relevant case law starting with *JBC of Wyoming Corp. v. City of Cheyenne*, 843 P.2d 1190 (Wyo. 1992). In *JBC* the

Wyoming Supreme Court acknowledged that "a breach of an independent duty which arises out of the contractual relationship may give rise to an action in tort." *Id.* at 1197 (citations omitted). However, the court held "[f]ailure to pay sums due under a contract" can only support a breach of contract claim. *Id.* In declining to extend a tort cause of action for consequential damages flowing from a breach of contract, the court listed three reasons:

> First, it is not our policy to recognize tort actions for purely economic damages.... Second, tort recovery based on the contractual relationship should only be allowed where the breach constitutes an independent injury over and above disappointment of the plaintiff's expectation interest.... Finally, tort liability can only be premised on a duty independent of contractual duties.

Id. (citations omitted). Unfortunately, *JBC* only addresses whether an independent duty arises for failure to pay under a contract. Id. at 1197. Since failure to pay is not an issue in the present case, *JBC* only helps to outline the broad principles of the independent duty rule.

The next case, *Rissler & McMurry v. Sheridan Area Water Supply Joint Powers Bd.*, presents a straightforward statement of law that when the parties have "contracted to protect against economic liability caused by the negligence of the defendant, there is no claim under Restatement of Torts (Second), supra, § 552 for purely economic loss." 929 P.2d at 1235. As part of its explanation, the court gave deference to the ability of sophisticated parties to order their affairs as they saw fit. Id. The CB&I Parties have taken up this language and pointed out that each party involved in the present matter is a sophisticated business entity and together they addressed all the alleged negligence issues in the ECP Contract. ECF No. 176, p. 19. Sinclair counters that this case is not applicable because the damages in *Rissler & McMurry* are economic while Sinclair's are not. ECF No 194, p. 17. For reasons discussed below, the parties' level of sophistication is much less important than whether the parties addressed the negligence claims in their contract and the type of damages is less important than the presence of an independent duty.

The Wyoming Supreme Court expressed the economic loss rule again in *Excel Construction, Inc. v. HKM Engineering, Inc.*, 2010 WY 34, 228 P.3d 40 (Wyo. 2010). In *Excel Construction*, the court held that even in cases of purely economic loss, a tort claim can survive if it flows from an independent duty. Id. ¶ 31, 228 P.3d at 48. This framing is helpful because it places the specific type of loss, economic or otherwise, subordinate to the question of whether there is an independent duty. The Wyoming Supreme Court also identified factors important in determining whether there is an independent duty. *Id.*, 288 P.3d at 48. These are a "consideration of the conduct alleged, its relationship to the contractual duties of the parties, the source of the tort duty alleged to have been breached, and the nature of the damages." *Id.*, 288 P.3d at 48.

Sinclair Wyoming Refinery Co. v. A&B Builders, Ltd., Case No. 15-CV-91-ABJ, Doc. 241, 4-6.

11. The factors identified in *A&B Builders*, relying upon *JBC,* provide meaningful guidelines in allowing the Court in this case to determine that the negligence claim asserted by Sinclair against Pro-Inspect in this case is barred. This case is one where a party may not sidestep contractual limitations by pleading a tort claim. Sinclair's attempt to assert the negligence claim is "simply a repackaged contract claim that requires consideration of the conduct alleged, its relationship to the contractual duties of the parties, the source of the tort duty alleged to have been breached, and the nature of the damages claimed." *Excel Construction, Inc. v. HKM Engineering, Inc.*, 229 P.3d 40, 48 (Wyo. 2010). Here, the conduct alleged by Sinclair to support its negligence claim against Pro-Inspect is the same as the conduct upon which the parties' contractual duties are based and similarly, the source of the tort duty Sinclair alleges to have been breached. There is no independent duty that sustains this negligence claim. Pro-Inspect is entitled to judgment its favor on the negligence claim asserted by Sinclair.

12. The Court concludes that Pro-Inspect was not negligent and that Sinclair is not entitled to the relief it requests.

Conclusion

For the reasons stated above, the Court concludes that Pro-Inspect is entitled to judgment in its favor on all claims and that Sinclair is not entitled to recover from Pro-Inspect on any of its claims. It is therefore

ORDERED that Sinclair is not entitled to relief in its favor on its breach of contract claim and that judgment shall be entered in favor of Pro-Inspect on that claim. **It is further**

ORDERED that Sinclair is not entitled to relief in its favor on its negligence claim and that

judgment shall be entered in favor of Pro-Inspect on that claim. **It is further**

ORDERED that Pro-Inspect shall recover its costs, pursuant to Fed. R. Civ. P. 54 and U.S.D.C.L.R. 54.2. **It is further**

ORDERED that any remaining pending motions shall be, and are, **DENIED AS MOOT.**

Judgment shall be entered accordingly.

Dated this 23rd day of August 2019.

ALAN B. JOHNSON
UNITED STATES DISTRICT JUDGE